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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/855,103	05/14/2001	Lee Goodman	12128-060001	8743
26161	7590	12/21/2004	EXAMINER	
FISH & RICHARDSON PC 225 FRANKLIN ST BOSTON, MA 02110				PIZARRO, RICARDO M
		ART UNIT		PAPER NUMBER
		2661		

DATE MAILED: 12/21/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.	Applicant(s)	
09/855,103	GOODMAN, LEE	
Examiner	Art Unit	
Ricardo Pizarro	2661	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

1) Responsive to communication(s) filed on 5/14/01.  
2a) This action is FINAL.                    2b) This action is non-final.  
3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

4) Claim(s) 1-21 is/are pending in the application.  
4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.  
5) Claim(s) \_\_\_\_\_ is/are allowed.  
6) Claim(s) 1-21 is/are rejected.  
7) Claim(s) \_\_\_\_\_ is/are objected to.  
8) Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

9) The specification is objected to by the Examiner.  
10) The drawing(s) filed on \_\_\_\_\_ is/are: a) accepted or b) objected to by the Examiner.  
    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  
11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) All    b) Some \* c) None of:  
    1. Certified copies of the priority documents have been received.  
    2. Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
    3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)	4) <input type="checkbox"/> Interview Summary (PTO-413)
2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)	Paper No(s)/Mail Date. _____
3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____	5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)
	6) <input type="checkbox"/> Other: _____

## **DETAILED ACTION**

### ***Drawings***

1. The informal drawings filed in this application are acceptable for examination purposes. When the application is allowed, applicant will be required to submit new formal drawings.

### ***Claim Objections***

2. Claim 10 is objected to because of the following informalities: In line 2 replace "the border" with –a border-. Appropriate correction is required.

### ***Claim Rejections - 35 USC § 103***

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 1-3, 7 –16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Thomas in view of Tasker.

US patent No. 6,665,271 (Thomas et al) discloses a System for real-time prediction on Quality for Internet-based multimedia communications comprising a method of providing service for use in a Vo IP environment –network- ( Voice over the Internet, col 14 lines 7-8) comprising: a plurality of service levels (i.e. service levels may include G.711, G.723, G.729, col 12 lines 63-67) ; and measuring voice call

listening quality according to a service level for voice calls transmitted across a Vo Ip environment –network- ( Audio fidelity across the network can be expressed using the traditional Mean Opinion Score [MOS] defined by International standards that expresses from 1 to 5 with 5 representing perfect fidelity and 1 representing total intelligibility, col 11 lines 61-67, col 12 lines 1-3) to produce voice call listening quality metric Values (i.e. metric values obtained through an a measurement method such as Mean Opinion Score – MOS-), as in claim 1; wherein a service level is associated with a type of voice codec ( i.e. voice codecs G.711, G.709 , col 12 line 66), as in claim 2; wherein the type of voice codec comprises a waveform codec ( waveform codec G.711, col 12 line 66) , as in claim 3; wherein the type of voice codec comprises a hybrid codec ( hybrid codec G.723, col 12 line 66), as in claim 7;wherein the voice call listening quality metric value corresponds to a Mean Opinion Score (MOS) value (i.e. MOS values from 1 to 5, col 11 line 66), as in claim 8; using the measured voice call listening quality metric values to determine whether a service level agreement guarantee provided to a user of the Vo Ip environment –network- is met ( by determining if MOS value expresses expected audio quality for a choice of specific codec algorithm such as G.711, G. 723, col 11 lines 63-67, col 12 line 66) , as in claim 9; wherein measuring comprises: controlling test probes deployed along the border of the Vo Ip environment –network- to engage each other in test calls and to make voice call listening quality measurements based on the test calls ( Probe system 400 in Fig. 4 is deployed along a Vo IP environment , col 7 lines 6-11), as in claim 10; wherein the test probes are connected to IP communication devices that are connected to the Vo IP environment -network-( col 7 lines 6-9), as in claim 11; wherein the IP communication devices comprise gateways ( endpoint gateways 405 and 410 In Fig. 4),

as in claim 12; wherein measuring comprises: controlling test probes deployed at the Vo IP environment –network- to engage each other in test calls and to make voice call listening quality measurements based on the test calls ( Probe system is an active measurement system because the initiating system must send a series of messages into the Internet and wait for responses, col 7 lines 7-10) as in claim 13; connected to a telephony network that is coupled to the Vo IP network by a gateway to generate test voice calls and to make voice call listening quality measurements based on the generated test voice calls ( PSTN network coupled to Vo IP environment –network- by a gateway, col 5 lines 7-10) , as in claim 14; wherein the selected service level is further associated with a VOIP signaling protocol ( signaling protocol H.323, col 6 line 49) as in claim 15 ; wherein the signaling protocol comprises H.323 ( col 6 line 49) , as in claim 16;

Thomas did not specifically disclose selecting a service level , as in claim 1. However US patent No. 6,754,232 ( Tasker) discloses a Dynamic codec selection and bandwidth allocation in a voice packet network , including a service level selection (Plural codecs –g.729, G.711- are associated with a given gateway 18 from wherein a suitable codec can be selected for a call, col 2 lines 26-32 and 61-63, col 3 lines52-57) as in claim 1.

Therefore, it would have been obvious to a person of ordinary skill in the art at the time of the invention the service level selection as disclosed by Tasker to the system disclosed by Thomas with the motivation of obtaining an optimum selection of codec speeds based upon demand and also to enable estimating the quality of service for Voice over Ip communications in real time.

5. Claims 3-7 are rejected under 35 U.S.C. 103(a) as being unpatentable over Thomas and Tasker, in further view of Yaakov.

Neither Thomas or Tasker specifically disclosed a network wherein measuring comprises measuring the voice call listening quality using a perceptual test model, as in claim 4; wherein the perceptual test model comprises Perceptual Analysis Measurement System (PAMS), as in claim 5; wherein the perceptual test model comprises Perceptual Speech Quality Measurement (PSQM), as in claim 6;

US patent No. 6,748,433 ( Yaakov) discloses a Method and system for controlling Quality of Service over a telecommunication network, comprising a network environment being a VOIP network environment ( col 8 line 64) , as in claim 1; wherein measuring comprises measuring a voice call listening quality using a perceptual test model ( PAMS model , col 3 line 29) , as in claim 4; wherein the perceptual test model comprises Perceptual Analysis Measurement System [PAMS] ( PAMS model, col 3 line 29) , as in claim 5; wherein the perceptual test model comprises Perceptual Speech Quality Measurement [PSQM] ( PSQM model , col 3 line 30), as in claim 6;

Therefore, it would have been obvious to a person of ordinary skill in the art at the time of the invention to provide to said systems the measuring method as disclosed by Yaakov with the motivation of obtaining a method of determining quality of the telecommunication service over a telecommunication network based on a combined estimation of quality of service for this network that is most effectively applicable to telecommunication networks including packet switched networks.

6. Claims 17-18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Thomas and Tasker, in further view of Havens.

Neither Thomas or Tasker disclosed a network wherein a VoIp signaling Protocol comprises SIP , as in claim 17; wherein the signaling protocol comprises MGCP ( col 3 line 16) as in claim 18.

However US patent No. 6,735,175 ( Havens) discloses a Quality of Service System for Voice over IP calls disclosing a VOIP network ( col 3 lines -78) wherein a VoIp signaling Protocol comprises SIP ( col 3 line 21), as in claim 17; wherein the signaling protocol comprises MGCP 9 col 3 line 16) as in claim18.

Therefore, it would have been obvious to a person of ordinary skill in the art at the time of the invention to provide to said systems the signaling protocol as disclosed by Havens with the motivation of obtaining a system that can estimate in real time the quality of communications over the Internet.

7. Claims 19-21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Thomas in view of Clark.

US patent No. 6,665,271 (Thomas et al) discloses a System for real-time prediction on Quality for Internet-based multimedia communications comprising a method of providing service for use in a Vo IP environment –network- ( Voice over the Internet, col 14 lines 7-8 ) comprising: a plurality of service levels (service levels include G.711, G.723, G.729, col 12 lines 63-67) and responsive to a test voice call directed to one of the phone numbers, cause the test voice call to be transferred over the IP network to a destination corresponding to a phone number ( Probe –Test- system 400 disclosed in fig. 4 is an active measurement system because the initiating system must send a series of messages -test message- into the Internet and wait for responses, col 7 lines 7-10) and causing a voice call listening quality to be measured for the associated

service level ( Audio fidelity across the network can be expressed using the traditional Mean Opinion Score [MOS] defined by International standards that expresses from 1 to 5 with 5 representing perfect fidelity and 1 representing total intelligibility, col 11 lines 61-67, col 12 lines 1-3) to produce a voice call listening quality metric value (i.e. metric values obtained through an a measurement method such as Mean Opinion Score – MOS-) , as in claim 19; wherein the service levels correspond to different types of voice codecs (i.e. service levels within the network may include codecs G.711, G.723, G.729, col 12 lines 63-67) , as in claim 20; wherein the service levels correspond to different combinations of voice codec types and types of VOIP signaling protocols ( said codecs G. 709, G.711 and signaling protocol H.323 col 6 line 49), as in claim 21.

Thomas did not specifically disclose associating said service levels with phone numbers associated with users , as in claim 19.

However US patent No. 6,741,569 (Clark) discloses a Quality of Service Monitor for multimedia communications system, comprising associating a service level with a phone number associated with a user ( each one of telephones 201 and 205 shown in Fig.2 have a voice codec 310 associated with them , said associated codecs located within Voice Monitors 207 and 208 respectively. Voice Monitors are shown in Fig. 3, col 6 lines 58-65, col 7 lines 28-32), ) , as in claim 19.

Therefore, it would have been obvious to a person of ordinary skill in the art at the time of the invention to provide the association method described in the Quality of Service monitor system disclosed by Clark to the system disclosed by Thomas with the motivation of obtaining a system for estimating the subjective or perceptual quality of a

multimedia communications system at the conversion points of a multimedia communications system.

***Conclusion***

8. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

- US patent No. 6,512,746 ( Sand) discloses a method and apparatus for measuring voice grade of service in an IP network.
- US patent No. 6,603,774 (Knappe et al) discloses Signaling and handling method .
- US patent No. 6,600,740 ( Valentine et al) discloses Voice Quality optimization on multi codec calls.
- Us patent no. 5,867,813 ( Di Pietro et al) discloses a Method and apparatus for automatically rating transmission quality of a transmission system.

9. Any response to this action should be mailed to:

Commissioner of Patents and Trademarks

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**or faxed to:**

(703) 872-9306

(for formal communications intended for entry, for informal or draft communications,  
please label "PROPOSED" or "DRAFT")

Hand-delivered responses should be brought to 220 South 20<sup>th</sup> Street, Crystal Plaza  
Two, Lobby, Room 1B03, Arlington, Va 22202 (Customer Window).

Art Unit: 2661

Any inquiry concerning this communication or earlier communications from the examiner should be directed to **Ricardo Pizarro** whose telephone number is (571) 272-3077. The examiner can normally be reached on Monday-Friday from 9:00 AM to 5:30 PM. The fax number for this Group is (703) 872-9306.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, **Kenneth Vanderpuye** can be reached on (571) 272-3078.

November 30, 2004

*Ricardo M. Pizarro*



KENNETH VANDERPUYE  
PRIMARY EXAMINER